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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/414,290	10/07/1999	JEFFERY M. ENRIGHT	D-1112R1	3095
28995	7590	10/01/2008	EXAMINER	
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231 SOUTH BROADWAY			ART UNIT	PAPER NUMBER
MEDINA, OH 44256			3692	
			MAIL DATE	DELIVERY MODE
			10/01/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/414,290	<b>Applicant(s)</b> ENRIGHT ET AL.	
	<b>Examiner</b> John D. Scarito	<b>Art Unit</b> 3692	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

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### **DETAILED ACTION**

In view of the remand from the Board of Patent Appeals and Interferences (BPAI), decided 7/17/2008, Examiner reopens prosecution. A Supervisory Patent Examiner (SPE) has approved reopening by signing below.

/Kambiz Abdi/  
Supervisory Patent Examiner, Art Unit 3692

In this reopening non-final office action, Examiner contemplates the *insight the BPAI provided in its remand* in regards to this application. In particular the BPAI instructed:

1. Examiner to contemplate the Supreme Court's emphasis of, in KSR, "the need for caution in granting a patent based on the combination of elements found in the prior art...". [BPAI Remand, page 4, lines 21-22].
2. Examiner that "many if not all the elements of the claimed apparatus appear to be well known in the art at the time of the invention." [BPAI Remand, page 5, lines 12-13].
3. Examiner to contemplate whether Applicant's invention "is more than the predictable use of prior art elements according to their established functions." [BPAI Remand, page 5, lines 8-9].
4. Examiner to consider the principle that "the combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results" [BPAI Remand, page 5, lines 5-7].

***Status of the Claims***

Claims 1-43 are currently pending. Claims 1-37 were originally presented on 10/07/1999 and Claims 38-43 were added by amendment on 05/14/2002.

***Examiner Comment***

In view of Applicant's preceding Appeal Briefs, Examiner notes that many of Applicant's arguments hinge on the allegation that explicit limitations recited in Applicant's presented claims are not explicitly found in the prior art of record. Here, Examiner points Applicant to MPEP 2141 "Examination Guidelines for Determining Obviousness Under 35 USC 103". In particular, this section states "Prior art is not limited just to the references being applied, but includes the understanding of one of ordinary skill in the art. *The prior art reference (or references when combined) need not teach or suggest all the claim limitations*, however, Office personnel must explain why the difference(s) between the prior art and the claimed invention would have been obvious to one of ordinary skill in the art. The "mere existence of differences between the prior art and an invention does not establish the invention's nonobviousness." *Dann v. Johnston*, 425 U.S. 219, 230, 189 USPQ 257, 261 (1976). The gap between the prior art and the claimed invention may not be "so great as to render the [claim] nonobvious to one reasonably skilled in the art." *Id* .....The proper analysis is whether the claimed invention would have been obvious to one of ordinary skill in the art after consideration of all the facts. See 35 U.S.C. 103(a). Factors other than the disclosures of the cited prior art may provide a basis for concluding that it would have been obvious to one of ordinary skill in the art to bridge the gap." Here, Examiner must "ensure that the written record includes findings of fact concerning the state of the art and the

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teachings of the references applied. In certain circumstances, it may also be important to include explicit findings as to how a person of ordinary skill would have understood prior art teachings, or what a person of ordinary skill would have known or could have done. ....In short, the focus when making a determination of obviousness should be on what a person of ordinary skill in the pertinent art would have known at the time of the invention, and on what such a person would have reasonably expected to have been able to do in view of that knowledge. This is so regardless of whether the source of that knowledge and ability was documentary prior art, general knowledge in the art, or common sense." [see MPEP 2141].

As such, Examiner contends a relevant question is what one of ordinary skill in the art would have known, what he/she could have done, and what he/she would have been expected to do in view of (1) the prior art teachings of record, and (2) the general knowledge in the art. This must, of course, be assessed without robbing one of ordinary skill in the art of common sense and logical rationale.

### ***Minor Claim Objections***

Claims 1-4, 6, 8, 12-15, 17, 19, 22-25, 29-32, 34, & 36-41 are objected to because of the following informalities:

1. As per Claim 1, Applicant introduces "automated banking machine" but later calls it "banking machine", "machine" etc. For consistency, Examiner suggests reference back as "the automated banking machine". Next, Applicant's "at least one transaction function" of his/her computer limitation already holds antecedent basis. Next, "the network" of Applicant's user terminal limitation should be "the at least one

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- communication network” for clear antecedent basis. Lastly, "images" in Applicant's user terminal limitation already holds antecedent basis.
2. As per Claim 2, "the banking machine" and “the machine” should be "the automated banking machine", "image data" should be "the image data corresponding to the camera signals” and “cash” already has antecedent basis.
  3. As per Claim 3, "image data" should be "the image data corresponding to the camera signals” and "cash" already has antecedent basis. Lastly, "the machine" should be "the automated banking machine".
  4. As per Claim 4, "the machine" should be "the automated banking machine" and "image data" should be "the image data corresponding to the camera signals”. Next, “a plurality of transaction function devices" already holds antecedent basis.
  5. As per Claim 6, “the banking machine" should be "the automated banking machine" in two instances. Next, "the transaction function" should be "the at least one transaction function.”
  6. As per Claim 8, “the machine” should be “the automated banking machine”.
  7. As per Claim 12, "the network" should be "the at least one communications network" for clear antecedent basis.
  8. As per Claim 13, "image data" should be "the image data corresponding to the camera signals”.
  9. As per Claim 14, “such a time period" should be "the time period".
  10. As per Claim 15, “a message” already holds antecedent basis earlier in the claim.

Further, "the network" should be "the at least one communications network" for clear

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antecedent basis.

11. As per Claim 17, “data store” already holds antecedent basis. Further, “the banking machine” should be “the automated banking machine”.
12. As per Claim 19, Examiner suspects that “the camera” should be “the at least one camera”.
13. As per Claim 22, “the image data” should be “the image data corresponding to the camera signals”.
14. As per Claim 23, “image data” should be “the image data corresponding to the camera signals” in two instances and “the network” should be “the at least one communications network” in two instances. Next, Examiner suggests “the data store level” in lieu of just “the level”.
15. As per Claim 24, “image data” should be “the image data corresponding to the camera signals” in two instances.
16. As per Claim 25, “the banking machine” and “the machine” should be “the automated banking machine”.
17. As per Claim 29, if Applicant incorporates Examiner’s suggestion in Claim 28 112-2<sup>nd</sup> rejection below, “the indicia” should be “the indicia data” and “to data representative of the written signatures” should be “said indicia data corresponding to the written signatures”. Further, “documents” already holds antecedent basis in Claim 25.
18. As per Claim 30, said claim is objected to under 37 C.F.R. 1.75(g). Applicant is reminded that all dependent claims should be grouped together with the claim or

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- claims to which they refer to the extent practicable. Claims 30 and its progeny are separated from Claim 4 by Claims 5-29.
19. As per Claim 31, Examiner suggests “one of the plurality of images of said set” in lieu of “the images in a set” and “said one of the plurality of images of said set” for clarity. In this vein, “the selected image” should be “the selected one of the plurality of images of said set”.
20. As per Claim 32, “the banking machine” should be “the automated banking machine”. Further, in line with Claim 31, “the selected image” should be “the selected one of the plurality of images of said set”.
21. As per Claim 34, Examiner suggests “the series of images” in lieu of just “the series” in two instances for clarity.
22. As per Claim 36, Examiner suggests “the series of images” in lieu of just “the series” in four instances for clarity.
23. As per Claim 37, Examiner suggests “the series of images” for clarity.
24. As per Claim 38, “the network” of Applicant’s “a terminal” limitation should be “the at least one communication network”. Next, “the retrieved image data” should be “the retrieved stored image data”.
25. As per Claim 39, “image data...” already holds antecedent basis. Further Examiner suggests “responsive to selecting said transaction function device” in lieu of “responsive to operation of a selected transaction function device” or alternative.
26. As per Claim 40, “the camera” should be “the at least one camera”.
27. As per Claim 41, “the network” should be “the at least one network”.



Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per Claim 1, Applicant introduces “at least one camera”, then later refers to it as “the camera” in multiple instances. Next, Applicant uses “include...in the data store”.

Examiner suspects that Applicant intended the meaning “stored” or “saved” but include may not fully convey this connotation. Lastly, due to Applicant’s repetitive use of “image data”, Applicant suspects that he/she is referring to the introduced “image data corresponding to the camera signals”. (see Claims 8 & 10 for reasons to believe that other “image data” are contemplated).

As per Claim 5, Applicant introduces “a plurality of cameras”. Examiner is confused since Applicant already introduced “at least one camera”. Here, “image data” becomes ambiguous. Examiner questions whether Applicant intended “the imaged data corresponding to the camera signals” of the at least one camera or a separate “image data corresponding to a second camera signals” (e.g. Claims 8, 10, etc.).

As per Claim 7, as drafted, Examiner questions whether Applicant's "indicia" is the "output images". Examiner suggests "the images output" in lieu of "the output images"

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for clarity.

As per Claim 8, Applicant introduces “a second camera” without indicating whether it is one of the “at least one camera”.

As per Claim 18, Examiner question whether Applicant is introducing another network or is referring to his/her “at least one communications network”.

As per Claim 20, Applicant introduces “a plurality of cameras”. Examiner is confused since Applicant already introduced “at least one camera”. In addition, Applicant does not indicate whether his/her “further network” is one of “the at least one communication network”.

As per Claim 23, Applicant states “to transfer data”. Examiner is confused as to what “data” Applicant is referring. (e.g. image data, other data, transaction data).

As per Claim 26, Examiner questions whether Applicant intends another meaning given differing language “image data produced responsive to the camera signals”. For purposes of examination, Examiner will interpret this not unlike “image data corresponding to the camera signals”.

As per Claim 27, Applicant does not indicate whether his/her introduced “a network” is one of “the at least one communication network”.

As per Claim 28, in view of Claim 27, Examiner questions to which “network” Applicant is referring. Examiner finds “data representative of indicia which is indicative of the genuineness of documents” complex. Examiner suggests “indicia data which is indicative of the genuineness of documents.”

As per Claim 30, Applicant states “the transaction function devices”. Here, Examiner

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questions whether Applicant is referring to “a plurality of transaction function devices” or “each of [said] plurality of transaction function devices.”

As per Claim 32, Examiner is confused by Applicant's "at least one transaction function device" given that Applicant already introduced “a plurality of transaction function devices” and “each of [said] plurality of transaction function devices.” Next, Examiner questions whether “a data store” is a separate data store. Lastly, Examiner questions whether “the corresponding transaction data” should be “the correlated transaction data”.

As per Claim 33, “the first icon” lacks antecedent basis.

As per Claim 34, per Claim 33, Applicant already introduced a "first icon".

As per Claim 36, per Claim 33, Applicant already introduced a “first icon”. Here, Examiner finds Applicant’s claim language almost incomprehensible. For instance, Examiner is perplexed what “operative to cause at least one image in the series disposed of a first number of images in the series from a currently displayed image” and “operative to cause at least one image in the series disposed a second number of images in the series from a currently displayed image” convey. For purposes of examination, Examiner will assume that another image of the series is displayed.

As per Claim 38, Applicant introduces “at least one camera”, then later refers to it as “the camera”. Next, due to Applicant’s repetitive use of “image data”, Applicant suspects that he/she is referring to the introduced “image data corresponding to the camera signals”.

As such, “the image data on a first date” should be “the image data corresponding to the camera signals on a first data”. Here, Examiner questions whether this should be "at least one camera signals" or "respective at least one camera signals" or the like for clarity.

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Lastly, Examiner questions whether “images” is “human images”.

As per Claim 39, “the function devices” lacks antecedent basis. This should be “the selected function device comprises a transaction function device...”.

As per Claim 40, “images” already holds antecedent basis. Further, this may be "human images". Further, Examiner questions whether "corresponding to customer image data" should be "corresponding to the retrieved stored customer image data” for clarity.

As per Claim 41, Applicant introduces "a plurality of transaction function devices" followed by "at least one transaction function device". Examiner suggests "at least one of said plurality of transaction function devices". Further, “images” already holds antecedent basis. Lastly, “the image data” should be “the image data corresponding to the signals”.

As per Claims 2-4, 6, 9-17, 19, 21, 22, 24, 25, 29, 35, 37, 42 & 43, said claims are rejected due to their dependence on a rejected claim.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 6, & 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nama [4,991,008] in view of Shiota et al [6,337,712] and further in view of non-patent literature document entitled "Java Goes Full Circle", by Anonymous ("Java").

As per Claim 1, Nama ('008) teaches the apparatus as follows:

**First**, Nama ('008) teaches an automated banking machine [Abstract, "automatic teller machine"] carrying out at least one transaction function [Abstract, "a financial transaction" & column 4, line 5, "withdrawal at an ATM"]

**Next**, Nama ('008) teaches at least one camera [Abstract, "video camera"] adjacent the banking machine [column 6, lines 17-19, "upper left hand corner of the ATM" & column 6, lines 20-24, "mounted in such a manner in respect to the ATM that the image field of the camera fully encompasses the identifying features of the individual involved in a transaction with the ATM"], wherein the camera is operative to produce camera signals corresponding to images [column 3, line 37, "camera provides a signal representative of the image"];

**However**, Nama ('008) does not explicitly disclose a computer including a server in operative connection with a data store, wherein the computer is in operative connection with the machine and the camera, and wherein the computer is operative to include image data corresponding to the camera signals in

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the data store responsive to the machine carrying out at least one transaction function; Regardless, Nama ('008) does disclose a "control unit" [column 6, line 42 & Figure 1, reference 100, e.g. a computer can be a server] that houses a "video recorder" [column 6, lines 41-42, & Figure 1, reference 101] where the "recording device is electrically coupled to receive and record from the transaction information module the combined camera image and transaction data signal for later visual monitoring..." [column 3, lines 47-50]. Here, the "video camera...[provides the] video image signal...via lead to the transaction information module [column 6, lines 25-28]. Examiner notes that Nama ('008) contemplates the "need for surveillance of a business transaction aris[ing] whenever an individual is given a task of entering data into an electronic device." [column 2, lines 36-38, e.g. responsive to the machine carrying out at least one transaction function]. In this vein, Shiota ('712) teaches a system for transferring and storing picture image data. [see Abstract]. Here, Shiota ('712) teaches the storage of "picture image data...in a large capacity disc of a server computer..." [column 1, lines 9-11]. In particular, Shiota ('712) specifically contemplates its invention as interconnected with ATMs [column 6, line 63] for picture image data storage and retrieval. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention to modify Nama ('008) to include the preceding limitations. One would have done so given Nama's ('008) appreciation that "it should be made clear that the transaction data entry means...may be interconnected in a myriad of [sic] ways to provide more of less data manipulation..." [column 8, lines 13-16]. The devices are fully supported and function in their predicted

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fashions. The exact relationships/interconnections between the structures is mere design choice.

**Next**, Nama ('008) does not explicitly disclose at least one communication network in operative connection with the server; Regardless, Nama ('008) does disclose its invention as "cooperatively linked with a remote, main banking facility..." [column 3, lines 65-66] and transmission "on lead (e.g. communication line)...to the main computer" [column 7, line 68, parenthetical added]. In this vein, Shiota ('712) teaches a "network photograph service wherein image data are stored in a server computer...so that [a user] can request download of the image data via the Internet or the like..." [column 1, lines 24-27].

Further, Shiota ('712) teaches alternative known means to transfer image data including "public telephone line" and "infrared communications" [column 1, lines 60-63]. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include at least one communication network in operative connection with the server. One would have done so to enable transfer of image data to/from said server in an efficient manner "regardless of where [the user] is, or regardless of whether or not [the user] has a personal computer" [column 6, lines 45-47].

**Lastly**, Nama ('008) does not explicitly disclose a user terminal including an output device in operative connection with the network, wherein the user terminal includes a browser, and wherein the user terminal communicates with the server through the browser and is operative to output images corresponding to the image data through the output device. Regardless, Nama ('008) does disclose its "surveillance system [as] cooperatively linked with a remote, main banking facility" [column 3, lines 65-66] where said facility comprises a "main computer at the remote

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central bank" [column 7, line 68-column 8, line 1, "e.g. user terminal] so that said facility can optionally record or visually monitor the ATM transactions. [see column 3, lines 67-68]. Here, said computer "returns [a] data transaction signal back over lead [to the transaction information module (e.g. TIM)]". [column 8, lines 3-5, e.g. output device]. In this vein, Shiota ('712) teaches the use of "personal computers and personal digital assistants" [column 1, line 15-16, e.g. user terminal] to "download...image data via the Internet or the like" [column 1, line 27]. Here, one can use such computing devices as an "accessing means which enables the picture image data stored in the image server to be accessed and utilized." [column 2, lines 39-40]. In particular, Shiota ('712) teaches that "image data are browsed [via a network] and transferred to a specified apparatus" [column 3, lines 13-15 & column 6, line 34, "image data browsing"]. Here, Examiner asserts that this implies a browser as present on the PC or PDA. As support, Java teaches the use of "Java-enabled browsers on ATMs" to access data via the Internet. [see Java, page 2, paragraph 6]. Here, Shiota ('712) contemplates "access (i.e. to the server) from a personal computer or a PDA via a network" [column 3, line 18, parenthetical added, e.g. output device]. A "file output service request" [column 6, line 49-50] results in receipt of the image data in a communication channel [column 6, line 43 & column 6, line 36, "transfer by download or attachment to an electronic mail message"]. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include the preceding limitations. One would have done so given "the rapid spread of personal computers and personal digital assistants (PDA)" and



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the "growing demand" for access to image data [see Shiota ('712), column 1, lines 15-17] "regardless of where [a user] is" [column 6, line 45].

As per Claim 2, Nama ('008) as modified teaches the apparatus of Claim 1 above.

Further, Nama ('008) teaches wherein the banking machine is operative to provide cash [column 4, line 5, "withdrawal at an ATM"], and wherein the computer is operative to include image data in the data store responsive to the machine operating to provide cash [column 4, lines 3-5, "video camera [] to receive an image of an individual(s) in a financial transaction such as a withdrawal at an ATM". See Claim 1 above for storage functionality.].

As per Claim 6, Nama ('008) as modified teaches the apparatus of Claim 1 above.

Further, Nama ('008) teaches the banking machine includes an input device [column 3, line 39, "transaction data entry keypad"], and wherein the input device receives input data through the input device [column 3, lines 33-34, "individual(s) involved in a financial transaction with an electronic storage device" & column 3, lines 39-40, "keypad [] provides a transaction data signal"], and wherein the banking machine carries out the transaction function responsive to the input data [column 4, lines 4-5, "financial transaction...withdrawal at an ATM"], and wherein the computer is operative to include in the data store transaction data corresponding to the input data [column 3, lines 47-50, "recording device is electrically coupled to receive and record from the transaction information module the combined camera image and transaction data signal for later visual monitoring.."].

As per Claim 17, Nama ('008) as modified teaches the apparatus of Claim 1. Further,

Nama ('008) teaches the server and data store are located within the banking machine. [see column 5, lines 14-15, "ATM", reference number 11 & column 6, lines 41-42, "a video recorder

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and control unit...for recordation on tape”] As noted above, the placement/interrelation of system components appears to be design choice.

As per Claim 18, Nama ('008) as modified teaches the apparatus of Claim 1. However, Nama ('008) does not explicitly disclose the camera signals are transmitted to the computer through a network. Regardless, Nama ('008) does contemplate its “ATM transaction surveillance system [as] cooperatively linked with a remote, main banking facility [computer] for the recording of transactions...” [column 3, lines 65-67 & column 8, lines 1-2, i.e. not only being recorded at the ATM, “signal on lead is delivered directly to the main computer at the remote central bank”]. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant’s invention to modify Nama ('008) to include the camera signals being transmitted to an external computer through a network. One would have done so given that Nama ('008) contemplates that “data entry means and the central bank computer may be interconnected in a myriad of [sic] ways...” [column 8, lines 13-15].

As per Claim 19, Nama ('008) as modified teaches the apparatus of Claim 1 above.

However, Nama ('008) does not explicitly disclose a camera server in operative connection with the camera, wherein the camera server is in operative connection with the computer. Regardless, Shiota ('712) teaches that its components, including its “image server (i.e. computer server of Claim 1) may be stored in a frame” (i.e. apparatus’ structure) [column 3, lines 60-61, parentheticals added]. However, for security purposes [column 3, line 63], Shiota ('712) teaches the optional use of a “temporary storage server [which] stores input image data (i.e. from a camera) temporarily” within the apparatus structure. [column 4, lines 1-

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3, parenthetical added]. Here, data transfer occurs between the temporary storage server to the image server via “a communication channel or the like”. [column 4, lines 11-12]. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant’s invention, to modify Nama (‘008) to include the preceding limitations. One would have done so to protect the data in a separate location [column 3, line 64] as well as it being potentially more “convenient and appropriate for the situation” [column 3, lines 37-38, e.g. less storage capacity needed at ATM, i.e. less expense].

Claims 3, 8-10, 14, 20, & 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nama [4,991,008] in view of Shiota et al [6,337,712] in view of Java as discussed above, and further in view of Hackett et al [5,926,210].

As per Claim 3, Nama (‘008) as modified teaches the apparatus of Claim 2 above.

However, Nama (‘008) does not explicitly disclose wherein the data store includes instructions including data representative of a predetermined amount, and wherein the computer is operative to include image data in the data store when an amount of cash provided by the machine is at least the predetermined amount. Regardless, Nama (‘008) does teach the use of “a transaction data entry keypad” to create a “transaction data signal” [column 3, lines 39-40] to activate its “transaction information module” for ultimate processing by its “video recorder and control unit” [column 6, line 42]. Further, Nama (‘008) generally supports the use of a trigger comprising the need for surveillance *arising when* an individual enters data. [column 2, lines 36-38]. In this vein, Shiota (‘712) teaches generally that “software...installed in the server computer [to enable system functionalities] obviously may be included...” [column 3, lines 22-27]. Examiner asserts that one of skill in the art would appreciate the storage

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of computer readable instructions in a data store for computer processor execution]. With this backdrop, Hackett ('210) teaches that "images are captured responsive to one or more inputs and/or at predetermined intervals" [column 4, lines 9-11]. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include stored program instructions that when executed cause the computer to trigger storage of image data when at least a predetermined amount of cash is provided by the automated banking machine. Here, Hackett ('210) teaches image capture as triggered by inputs including an optional predetermined input. [cite above] Further, Hackett ('210) teaches "the configuration of the system is easily modified to accommodate virtually any type of input signal for triggering [] image transmission." [column 15, lines 3-6]. A "predetermined amount" is merely a substituted trigger in response to an input with predictable results (i.e. images captured). Further, one of skill in the art would appreciate that risk and respective need for evidence [see Nama ('008), column 1, lines 48-50] increases with increasing amounts of funds potentially being lost. Setting such a predetermined amount would be merely design choice based on the entity's tolerance for risk.

As per Claims 8 & 9, Nama ('008) as modified teaches the apparatus of Claim 1 above.

However, Nama ('008) does not explicitly disclose a second camera, wherein the second camera produces second camera signals corresponding to a service area of to the machine, and wherein the computer is operative to include in the data store image data corresponding to the second camera signals OR the second camera is located in an interior of the automated banking machine. Regardless, Hackett ('210) teaches a security system comprising "a plurality of cameras...arranged to capture images of zones associated with the interior [of the apparatus] or its exterior and current

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ambient environmental surroundings." [Abstract]. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include another camera that produces images of a service area (i.e. behind the ATM or inside the ATM) and the saving of said service area images not unlike images in Claim 1. One would have done so given that often the "operational environment of the [apparatus] may dictate the need for forms of monitoring..." [Hackett ('210), column 2, lines 1-2]. Here, one of skill in the art would appreciate that ATMs in a theft prevalent area would desire additional camera views to protect "unguarded repositories of substantial sums of cash...[which attracts] those whose motives are less than honorable". [Nama ('008), column 1, lines 16-17 & 19].

As per Claim 10, Nama ('008) as modified teaches the apparatus of Claim 8 above.

However, Nama ('008) does not explicitly disclose the data store further includes motion detection instructions, and wherein the computer is operative responsive to the motion detection instructions to include the image data corresponding to the second camera signals in the data store.

Regardless, not unlike above, Shiota ('712) teaches generally that "software...installed in the server computer [to enable system functionalities] obviously may be included..." [column 3, lines 22-27]. Here, Hackett ('210) teaches triggers for image capture such as "a motion detector...are well known in the art." [column 1, lines 34-35, i.e. alarm indication prompts capture of images (see Hackett ('210), column 1, line 23, "in response to alarm or other input signals"]. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Hackett ('210) to include the preceding limitations. One would have done so given the reality, in a physical

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environment, that physical actions will be an area of interest for capture. Using a motion detector and the capture of images only when motion is detected would predictably use less storage capacity. (e.g. less images when the environment is unchanging).

As per Claim 14, Nama ('008) as modified teaches the apparatus of Claim 1 above.

However, Nama ('008) does not explicitly disclose the data store includes instructions for determining a time period during which the data store is expected to continue to accept additional data, and wherein the computer is operative responsive to the instructions to calculate such a time period.

Regardless, Shiota ('712) teaches generally that "software...installed in the server computer [to enable system functionalities] obviously may be included..." [column 3, lines 22-27]. In this vein, Hackett ('210) teaches a system that receives an input signal and responds "by capturing and storing at least one alarm image" [column 3, lines 13-14, e.g. accept additional data]. Here, Hackett ('210) indicates the said system "responds to at least one input signal *for a predetermined period of time after the* [apparatus] *is stationary*" [column 3, lines 18-19, emphasis added]. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include the preceding limitations. One would have done so given that storage is not unlimited [see Hackett ('210), column 2, line 54] and power conservation may be an issue [Hackett ('210), column 15, line 15], thus the period of time for capturing data may be critical (e.g. do not want to run out of storage or have a break in image capture at a peak usage time, etc.). In this vein, "the predetermined interval may be set to virtually any desired time" [column 15, lines 13-14] based on the "operational environment of the [apparatus]" [column 2, line 1]. Further, images often include

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additional parameter data such as "the date of capture and the time of capture" [column 4, lines 7-8, e.g. time based information]. Surely one of skill in the art would appreciate the calculation of capacity for recording given storage and power resources.

As per Claim 20, Nama ('008) as modified teaches the apparatus of Claim 1 above.

However, Nama ('008) does not explicitly disclose a plurality of cameras, and wherein a further network is in operative connection with the plurality of cameras and the computer, wherein the plurality of cameras communicate with the computer through the further network. Regardless, Hackett ('210) teaches a security system comprising "a plurality of cameras...arranged to capture images of zones associated with the interior [of the apparatus] or its exterior and current ambient environmental surroundings." [Abstract]. In this vein, Hackett ('008) teaches the conventional use of "telephone lines for [] communication" when a "fixed-site" system is contemplated. [column 2, lines 11 & 13]. Further, Hackett ('008) discloses the use of "wireless transmission (i.e. cellular channel) to transfer images to a remote location" [see Abstract & column 3, lines 56 & 58]. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include the preceding limitations. Here, Nama ('008) contemplates "data entry means and the central bank computer may be interconnected in a myriad of [sic] ways..." [column 8, lines 14-15]. Practically, this is the substitute of one communication channel for another communication channel with predictable results. Further, the duplication of cameras for multiple effects has predictable results. Each camera performs the same function it would separately.

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As per Claim 22, Nama ('008) as modified teaches the apparatus of Claim 1 above.

Further, Nama ('008) teaches the data store comprises a recording device [column 6, line 42-43, "video recorder"]. However, Nama ('008) does not explicitly disclose having a removable storage medium, wherein the image data is recorded on the removable storage medium. Regardless, Nama ('008) does disclose its storage medium as a "tape" [column 6, line 44. This appears to be removable not unlike a fully integrated hard disk.]. In this vein, Hackett ('210) teaches that its storage media for storing images in its system may be "removable storage media". [see Abstract]. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention to modify Nama ('008) to include a data store with a removable storage medium for the recordation of image data. One would have done so given that ATM's are often "unguarded repositories" [Nama ('008), column 1, line 16] which often necessitates security precautions comprising only the temporary storage of data [Shiota ('712), column 3, line 63-column 4, line 3]. Further, retrieval of said removable storage media may be merely normal maintenance on such systems [column 4, line 26].

Claims 11, 12, 15, 21, 23, 24, 42 & 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nama [4,991,008] in view of Shiota et al [6,337,712] in view of Java in view of Hackett et al [5,926,210] as discussed above, and further in view of Official Notice.

As per Claim 11, Nama ('008) as modified teaches the apparatus of Claim 8 above.

However, Nama ('008) does not explicitly disclose a door, wherein opening the door is operative to provide access to the service area, and further comprising a sensor in operative connection with the door, and further comprising instructions in the data store, wherein the computer is operative responsive to the



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instructions and the sensor indicating that the door has been moved to an open condition, to include the image data corresponding to the second camera signals in the data store. Regardless, as previously discussed, Shiota ('712) teaches generally that "software... installed in the server computer [to enable system functionalities] obviously may be included..." [column 3, lines 22-27] while Hackett ('210) teaches the capture of images "in response to alarm or other input signals" [column 1, line 23] via "trigger[ing] by inputs such as a panic button and an impact sensor" [column 4, lines 11-12]. Here, Official Notice is taken that mechanical/electrical sensors to detect movement of an object are old and well established in the art. (i.e. brake light sensor on a brake pedal). In this vein, Hackett ('210) teaches a "component enclosure" that "includes a door" which is desired "to be tamper resistant" [see column 5, lines 55-67]. Here, Hackett ('210) specifically contemplates that alarm sensors (i.e. to trigger image capture) "may be positioned within [the] component enclosure" [column 9, lines 43-44]. As such, in view of the above, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include the preceding limitations. Here, a mechanical/electrical movement sensor is merely a simple substitute for other sensors contemplated by Hackett ('210) with predictable results (i.e. trigger capture of images for security reasons). Further, Hackett ('210) specifically contemplates the optional capture of images on the interior of an apparatus. Pictures taken from the inside of an enclosure, activated by a door opening, would be desired because the camera would be protected by the enclosure and the picture could be taken before a perpetrator is aware. This would ensure "controlled access to the interior of [an] enclosure" [Hackett ('210), column 5,

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lines 66-67, e.g. the pictures would show who is entering the enclosure]. Examiner points Applicant to Claim 1 discussion for support regarding the saving of the images in a data store.

As per Claim 12, Nama ('008) as modified teaches the apparatus of Claim 11 above.

However, Nama ('008) does not explicitly disclose the computer is further operative responsive to the instructions to send an e-mail message through the network. Regardless, Shiota ('712) supports image data being stored at an "image server" [column 2, line 34-35] with optional "file output to a predetermined medium [or] data transfer by download or attachment to an electronic mail message". [column 6, lines 35-37]. Here, Official Notice is taken that automatic e-mail generation based on a trigger is old and well-established in the art. (i.e. out of office auto-reply). As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include notification based on a trigger and its respective image data via e-mail message. One would have done so given that Nama ('008) supports the transfer of image data to a "remote, main banking facility for recording of transactions or visual monitoring of transactions..." [column 3, lines 66-67] "on lead" [column 7, line 68, e.g. communication channel]. Further, Hackett ('210) supports "a remote monitoring station [which] is immediately notified of a problem" [column 2, lines 8-9] where, "in response to [sensor] inputs, the system immediately captures alarm images and transfers these images to a remote location..."[column 4, lines 12-15].

As per Claim 15, Nama ('008) as modified teaches the apparatus of Claim 14 above.

However, Nama ('008) does not explicitly disclose the instructions include message instructions

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for sending a message, and wherein the computer is operative responsive to the message instructions to send a message through the network wherein the message includes data representative of the time period. Regardless, Shiota ('712) teaches generally that "software...installed in the server computer [to enable system functionalities] obviously may be included..." [column 3, lines 22-27]. In this vein, Shiota ('712) supports image data being stored at an "image server" [column 2, line 34-35 Examiner notes that image data is broadly interpreted to include time data.] with optional "*file output to a predetermined medium [or] data transfer by download or attachment to an electronic mail message*". [column 6, lines 35-37, emphasis added]. Here, Official Notice is taken that indicators portraying time period remaining are old and well-established in the art. (i.e. 8 mm video camcorders indicating taping time remaining, VCRs indicating time remaining in a movie, etc.). As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include the preceding limitations. Here, Hackett ('210) supports "a remote monitoring station [which] is immediately notified of a problem" [column 2, lines 8-9, e.g. time before tape runs out] where, "in response to [sensor] inputs, the system immediately captures [data] and transfers this [data] to a remote location...."[column 4, lines 12-15]. Shiota ('712) discloses the known ability to transfer data via an electronic mail message. Here, "time period data" is merely another form of "data" easily substituted in a message with predictable results. Further, in view of Claim 14, concerns (e.g. storage, power constraints), Nama ('008) would desire to be notified of such information for uninterrupted recording or visual monitoring of transactions from a remote facility [see column 3, lines 66-68].

As per Claim 21, Nama ('008) as modified teaches the apparatus of Claim 20 above.

However, Nama ('008) does not explicitly disclose the further network includes a power supply network. Regardless, Hackett ('210) contemplates that a remotely located apparatus must contemplate a power supply (i.e. battery) to fulfill "power requirements" [column 15, line 15]. Here, Official Notice is taken that it is old and well establishes that communication channels comprise some form of power supply or power distribution. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include the further network including a power supply. One would have done so given that such a network is often electronic (i.e. data signals) and the fact that transmission of data signals practically necessitates a power supply of some form.

As per Claim 23, Nama ('008) as modified teaches the apparatus of Claim 1 above.

However, Nama ('008) does not explicitly disclose the data store includes instructions for determining if an amount of image data in the data store is at a level, and further comprising a remote data store in operative connection with the network, wherein the computer is operative responsive to the amount of the image data being as great as the level, to transfer data through the network to the remote data store.

Regardless, Examiner points Applicant to the logic and evidence of Claims 14 & 15 above (i.e. instructions on the server, storage capacity, power conservation, avoid break in capture during a critical time period, indicators portraying time period remaining (e.g. storage capacity) are known). In this vein, Shiota ('712) teaches the ability to transfer image data from a "temporary storage server to [an] image server via a communication channel" when desired. [column 4, lines 11-12]. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama

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('008) to include the preceding limitations. One would have done so given that reaching an implied capacity limitation (i.e. level) of a storage medium necessitates transfer or deletion of previous data to avoid missing intervening image data. Nama ('008) would desire this as it already contemplates "allow[ing] previously recorded image and transaction data to be delivered from video recorder via lead to back up video recorder to be recorded". [column 7, lines 14-17].

As per Claim 24, Nama ('008) as modified teaches the apparatus of Claim 23 above.

However, Nama ('008) does not explicitly disclose the data store includes further instructions, wherein the computer is operative responsive to the further instructions to erase image data in the data store after transfer of such image data to the remote data store. Regardless, in line with Claim 23, Shiota ('712) teaches the use of a "temporary storage server" for the storage of "input image data temporarily". Although Shiota ('712) does not explicitly disclose instructions to erase image data after its transfer, Examiner asserts that one of skill in the art would appreciate that "temporary" appears to imply that said data is removed after transfer. Otherwise, the efforts to "secure" the image data [column 3, line 63] would be moot. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include the preceding limitations. Nama ('008) would desire this because it promotes remote "recording of transactions" [column 3, line 67] and as long as a copy has been produced, further back ups can be created. [column 7, lines 15-17].

As per Claim 42, Nama ('008) as modified teaches the apparatus of Claim 41. Here, Examiner points Applicant to the logic and evidence discussed in Claim 9 with regards to

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such further limitations.

As per Claim 43, Nama ('008) as modified teaches the apparatus of Claim 42 above.

Here, Examiner points Applicant to the logic and evidence discussed in Claim 17 with regards to such further limitations.

Claims 5 & 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nama [4,991,008] in view of Shiota et al [6,337,712] in view of Java as discussed above, and further in view of Hackett et al [5,926,210] and Hoang [6,014,183].

As per Claim 5, Nama ('008) as modified teaches the apparatus of Claim 1 above.

However, Nama ('008) does not explicitly disclose a plurality of cameras, and wherein the data store further comprises instructions including a sequence, wherein the computer is operative to sense lack of usable video from a first camera and to store image data from a second camera responsive to the sequence. Regardless, not unlike above, Shiota ('712) teaches generally that

"software...installed in the server computer [to enable system functionalities] obviously may be included..." [column 3, lines 22-27]. In this vein, Hackett ('210) teaches its security system as including "a plurality of cameras" [Abstract] where images are captured "in response to...input signals" [column 1, line 23]. Here, Hackett ('210) teaches its cameras as "arranged to provide images of zones" [column 3, line 40] of interest.

Further, Hackett ('210) discloses the transmission of "preselected ones of the images stored at the platform" [column 3, line 14]. Similarly, Hoang ('183) teaches the analysis of images "in order to identify scene changes" [column 1, lines 13-14]. Here, Hoang ('183) contemplates an editing methodology that "pieces together" image segments recorded at "different...places" to arrive at the desired footage. [see column 1, lines 20-

24]. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include a plurality of cameras and stored program instructions (i.e. in a data store) that when executed cause the computer to process a sequence of instructions for capturing images data from a second camera if unusable video from a first camera is evident. One would have done so given that Nama ('008) discloses as its "primary object...to provide a permanent *viewable* image of the individual(s) and item involved in a transaction" [column 3, line 55-56, emphasis added]. If an image is distorted, obscured, etc., that viewable image of zones of interest should not be recorded. Here, Hoang's ('183) ability to identify/sense scene changes supports the ability to determine that "a threshold" [column 1, line 66] has occurred to switch to "a different scene or the same scene viewed from a different angle" [column 1, lines 57-58] to adequately capture the transaction.

As per Claim 13, Nama ('008) as modified teaches the apparatus of Claim 1 above.

However, Nama ('008) does not explicitly disclose wherein the data store includes instructions representative of a sequence, and wherein the computer is operative responsive to the sequence to include image data in the data store, and wherein the user terminal has in connection therewith a user terminal input device, and wherein the sequence is changeable through an input to the user terminal input device.

Regardless, Examiner points Applicant to the logic and evidence of Claim 5 above regarding stored program instructions in the data store that when executed cause the computer to process a sequence for storing image data. Further, Nama ('008) teaches "a signal [being] initiated from the [central bank] main computer on lead" [column 7, lines 10-11] "to interrupt the normal recording of the combined video image and transaction data signal by video recorder..." [column 7, lines 6-8]. Examiner notes that Nama ('008)

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states that encoding/decoding occurs by “a wholly conventional manner” [column 8, line 3] thus implying the use of conventional input/output devices as known in the art. On its face, this is a change in the sequence of images brought about by a change initiated by a user terminal input. As further support, Shiota ('712) supports the browsing, searching, ordering, outputting, and transferring [see column 3, lines 13-15] of image files by personal computer, PDA or alternative external access (i.e. other user terminals) via “communication equipment [including]...inputting means, including a keyboard and a touch panel...” [column 3, lines 17-20]. This generally buttresses external control of how a software program of a server [column 3, line 22] executes its codes. Similarly, Hoang ('183) teaches a system for monitoring a data stream and the detection of scene changes. [see Abstract] Here, Hoang ('183) teaches that its scene change detection is controlled by “a threshold for determining a 'high degree of change' [as] *set by the user*” [column 1, lines 66-67]. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include the preceding limitations. Here, a user is his own editor of the images and has control over what images are captured and pieced together as desired. [see Hoang ('183), column 1, lines 20-24].



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Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nama [4,991,008] in view of Shiota et al [6,337,712] in view of Java in view of Hackett et al [5,926,210] as discussed above, and further in view of Hoang [6,014,183] and Official Notice.

As per Claim 16, Nama ('008) as modified teaches the apparatus of Claim 14 above.

However, Nama ('008) does not explicitly disclose the data store includes a transaction history pattern, and wherein the computer calculates the time period responsive to the transaction history pattern.

Regardless, Hoang ('183) supports the logic of Claim 14 above by teaching that storing continuous output of a camera "would require large amounts of memory" [column 3, line 66-column 4, line 1]. In this vein it would be more efficient to "save only one representative frame from the output of the camera each time the scene changes" [column 4, lines 2-6, e.g. when a customer is using the ATM]. In this vein, it is noted that the storage of data is merely creating a "history" of transactions for later review [Nama ('008), column 3, line 50]. Here, Official Notice is taken that the assessment of past transaction histories to predict/forecast future transaction histories is old and well established in the art. (i.e. a store or bank calculating how much cash it must have on hand given the day of the week, etc.). As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include the preceding limitations. In line with Claim 14, Nama ('008) would desire the assessment of past transaction patterns to determine how many expected transactions are to occur so that storage is available for the capture critical images. Surely one of skill in the art would appreciate that the number of captures and the length of those captures necessarily have a limiting affect on the capacity of storage available. If this constraint is

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not accounted for, one could lose images and not attain sufficient transaction evidence [see Nama ('008), column 1, line 50].

Claims 4, 7, 30-32, & 38-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nama [4,991,008] in view of Shiota et al [6,337,712] in view of Java as discussed above, and further in view of Official Notice.

As per Claim 4, Nama ('008) as modified teaches the apparatus of Claim 1 above.

However, Nama ('008) does not explicitly disclose wherein the machine includes a plurality of transaction function devices, and wherein the computer is operative to include image data in the data store responsive to operation of each of a plurality of transaction function devices during a transaction. Here, Examiner takes Official Notice that it is old and well-established that automated banking machines commonly have a plurality of transaction function devices (i.e. presenter for disbursing cash, depositor for receiving deposits, card reader, keypad, etc). As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include the automated banking machine with a plurality of transaction function devices with the computer operative to store image data responsive to each of said plurality of transaction function devices. Here, Applicant is merely combining known components (i.e. transaction devices) according to known methods (i.e. image capture based on interaction with a device, see Claim 1 above) to produce predictable results. Each transaction function device performs the same function it would separately.

As per Claim 7, Nama ('008) as modified teaches the apparatus of Claim 6 above.

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However, Nama ('008) does not explicitly disclose the user terminal is operative to process the transaction data with the browser, and to output indicia corresponding to the transaction data with the output images through the output device. Regardless, Examiner points Applicant to Claim 1 above regarding the incorporation of a browser on a user terminal and/or an ATM. Here, Official Notice is taken that it is old and well established that computer browsers process input data to output information (i.e. enriched data) to a user via a user interface (e.g. enter a search string to display relevant results often including images). In this vein, Nama ('088) does disclose the delivery of the "combined image and transaction data signal" to a "video monitor" [column 6, lines 45-47] where indicia comprising "every detail of the transaction data" can be displayed [column 6, line 58-59]. Here, Shiota ('712) supports "picture image data browsing" [column 6, line 35] as well as the provision of indicia associated with a transaction image comprising "recording property information" [column 3, lines 49-53, i.e. date or recording, file name, etc.] which helps enable searching "picture image data stored in the image server". [column 5, line 62 to column 6, line 30]. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include the preceding limitations. One would have done so to efficiently search and display recorded images and to adequately verify images by their "unique" [column 6, line 1] "recording property information" [column 6, line 15] for the desired assessment.

As per Claim 30, Nama ('008) as modified teaches the apparatus of Claim 4 above.

However, Nama ('008) does not explicitly disclose the output device of the user terminal comprises a display, and wherein the display is operative to display a plurality of images corresponding to operation of the transaction function devices during the transaction, together in a set on the display.

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Regardless, Nama ('008) does teach optionally "link[ing] with a remote, main banking facility for...the visual monitoring of transactions at the ATM". [column 3, line 66-68]. In support, Shiota ('712) teaches access to image data via an external PC or PDA via a "monitor" which is connected with the "image server" through which "picture image data are displayed...in response to [a] request" [column 3, lines 18-24]. Further, Shiota ('712) supports "the image data [being] browsed" [column 3, line 13, e.g. implying multiple picture views at once.]. Here, Official Notice is taken that the ability to display more than one image in a set on a display is old and well established in the art. (i.e. picture-in-picture, Microsoft windows). As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include the preceding limitations. Here, if one transaction function device can be displayed in its use, (i.e. as discussed in preceding claims, e.g. withdrawal at an ATM) it would be an obvious variant to provide duplicate displays of images of other transaction functions for multiple effect. Examiner asserts it as common sense to provide a set of images dealing with the same transaction (i.e. surveillance of a complete transaction).

As per Claim 31, Nama ('008) as modified teaches the apparatus of Claim 30 above.

However, Nama ('008) does not explicitly disclose the user terminal further comprises an input device, wherein the input device is selectively operative to select one of the images in a set, and wherein the user terminal is operative responsive to selection of one image in a set, to display a larger version of the selected image on the display. Regardless, Shiota ('712) teaches accessing means as including "a keyboard and a touch panel" as tools to search "picture image data" [column 3, lines 20 & 24]. Examiner notes that a computer mouse is a conventional substitute for a keyboard to select images on a computer display. In this vein, Official Notice is taken

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that user interfaces commonly permit the clicking of an image to display a larger version of the selected image on the display. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include the preceding limitations. Here, as discussed, selection means are known and operate according to their designed functions. Further, in a surveillance application, it is common sense that a larger image may be desired in order to better see what is being displayed.

As per Claim 32, Nama ('008) as modified teaches the apparatus of Claim 31 above.

Further, Nama ('008) teaches the banking machine is operative to produce transaction data responsive to operation of at least one transaction function device [column 3, line 39-40, "transaction data entry keypad which provides a transaction data signal"], and wherein the computer is operative to store data representative of the transaction data in a data store in correlated relation with the corresponding image data [column 3, lines 47-49, "recording device...to...record from the transaction information module the combined camera image and transaction data signal"] AND wherein the corresponding transaction data is output on the display of the user terminal with the selected image [see Figure 1, reference 110 & column 6, lines 45-47]. However, Nama ('008) does not explicitly disclose wherein the transaction data is accessed by the user terminal with the browser [see Claim 1 above. Examiner notes under Nama's ('008) teaching, accessing the image would also access the transaction data.].

As per Claim 38, Examiner points Applicant to the evidence and logic of substantially similar Claim 4 above. Here, Examiner notes that Nama ('008) specifically contemplates receiving images "of an individual" [column 4, line 4, e.g. human image]. Further, Examiner notes that if a communication network is in operative connection with a server

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and the server is in operative connection with a data store, then the communication network is also in operative connection with the data store. Next, Shiota ('712) teaches operative connection of the terminal with the data store [column 3, lines 9-10, "image data stored in the image server...accessed and utilized...via PC & PDA, column 3, line 18]. Next, Nama ('008) and Shiota ('712) specifically contemplate a remote terminal. [Nama ('008), column 3, line 66 & column 8, line 1, "remote banking facility [computer]" & Shiota ('712), Abstract "away from home" & column 3, line 59, "at a convenience store"]. Next, Shiota ('712) teaches a terminal comprising a display device [column 3, line 19, "monitor"]. Lastly, with regard to Applicant's "first date" and "second date different from the first date" limitations, Nama ('008) specifically contemplates its recording device as making possible "later visual monitoring of a composite picture that includes both the camera image and...transaction data signal" [column 3, lines 50-52]. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include such limitations. One would have done so, not only in consideration of the logic and rationale as discussed in Claims 1 & 4 above, but also given that time-shifting of desired data/images for later viewing would be appreciated in the art. Here, it would be inefficient to review a multitude of non-suspect recorded transactions. As taught by Nama ('008), the ultimate goal of video-recording and record keeping is to attain enough evidence [column 1, line 50] to avoid financial loss.

As per Claim 39, Nama ('008) as modified teaches the apparatus of Claim 38 above.

Here, Examiner points Applicant to the logic and evidence of substantially similar Claim

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4 above. Here, Examiner notes that a transaction function device is implicitly selected by an individual "entering data into an electronic device" [column 2, line 37] chosen (i.e. key pad, card swipe, etc.). Further, images would be taken "during" an ATM transaction, since they must actually capture "an individual in a financial transaction" [column 4, lines 4-5].

As per Claim 40, Nama ('008) as modified teaches the apparatus of Claim 39 above.

Here, Examiner points Applicant to Claim 38 above regarding camera signals corresponding to a customer (i.e. an individual). Here, Nama ('008) specifically contemplates the transfer of images (e.g. logically including that of a customer) for "visual monitoring of transactions at the ATM" [column 3, line 67-68, e.g. via display device as discussed in Claim 38].

As per Claim 41, Examiner points Applicant to the evidence and logic of substantially similar Claims 4 & 38 above. Here, Examiner notes that a camera is an "image device".

Claims 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nama [4,991,008] in view of Shiota et al [6,337,712] in view of Java in view of Official Notice as discussed above, and further in view of Hoang [6,014,183].

As per Claims 33 & 34, Nama ('008) as modified teaches the apparatus of claim 31 above. However, Nama ('008) does not explicitly disclose the display includes an icon, and wherein selection of the [first] icon with the input device is operative to selectively cause images in a series of images to be made visible on the display OR the display comprises a first icon and a second icon, wherein selection of the first icon with the input device is operative to cause at least one image in a first direction in the series to be made visible and wherein selection of the second icon with the input device is

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operative to cause at least one image in a second direction in the series other than the first direction, to be made visible on the display. Regardless, Official Notice is taken that the use of icons to execute computer program functionalities (e.g. selection...operative to...,) is old and well established in the art. (i.e. short-cut commands, forward/backward button). In this vein, Hoang ('183) teaches that it is often "desirable to analyze a digital video data stream" [column 1, lines 12-13]. Here, a video data stream comprises "any series of digital image frames whether they comprise a full motion video or simply a sequence of discrete 'still' images" [column 1, lines 14-17]. As such, Hoang ('183) teaches a video editor as desiring to "assembl[e] various portions of the video footage into the desired sequence..." [column 1, lines 20-21]. Lastly, Hoang ('183) teaches that upon a scene change, its invention "catalogs the scene change and then also saves a representative frame from the prior scene which is used to identify that scene" [column 1, lines 59-62]. Here, each scene has a timecode marking the "start and end of the scene" and is referenced with a representative frame. [column 2, lines 1-3]. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include the preceding limitations. One would have done so given that Hoang ('183) specifically contemplates its invention as useful for ATM security [column 3, line 66]. Here, each scene change (e.g. when a customer moved into view), marks a new scene. [column 4, lines 1-6]. Surely one of skill in the art would appreciate more efficient navigation between scenes (i.e. forward and backward through reference scenes) when attempting to "readily locat[e]" an "appropriate scene" of interest [column 1, line 27, e.g. where questionable actions have occurred.] through shortcuts commands.



As per Claims 35-37, Nama ('008) as modified teaches the apparatus of Claim 33 above.

However, Nama ('008) does not explicitly wherein selection of the icon is operative to scroll through the series of images OR wherein the display comprises a first icon and a second icon, wherein selection of the first icon with the input device is operative to cause at least one image in the series disposed of a first number of images in the series from a currently displayed image, to be displayed on the display, and wherein selection of the second icon with the input device is operative to cause at least one image in the series disposed a second number of images in the series from a currently displayed image, to be displayed OR wherein the at least one image displayed responsive to the first icon and the at least one image displayed responsive to selection of the second icon, are each disposed in a first direction in the series from the currently displayed image. Regardless, Examiner points Applicant to the logic and evidence of Claim 33 above. Further, Official Notice is taken that navigation comprising scrolling (i.e. software functionality) via an icon is old and well established in the art. (i.e. scroll bar button in Microsoft windows). Lastly, Official Notice is taken that it is old and well established that an image can be used as an icon to open a series of images/data related to said image. [see Hoang ('183), column 6, lines 9-18, "input video data stream" is a "sequence of individual frames and associated data". Here, the multiple frames are "associated with one scene" (i.e. icon) which may be "the first frame from the scene" or "the most representative frame from the scene", or as desired.]. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include the preceding limitations. Here, Applicant is claiming known computational data manipulation elements (e.g. scroll, hyper-linking related data, forward/backwards in a series of data) with predictable results. Each element performs its separate intended functionality regardless of the data being

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manipulated.

Claims 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nama [4,991,008] in view of Shiota et al [6,337,712] in view of Java as discussed above, and further in view of Kadono et al [5,010,238].

As per Claim 25, Nama ('008) as modified teaches the apparatus of Claim 1 above.

However, Nama ('008) does not explicitly disclose the banking machine includes an imaging device, wherein the imaging device is operative to generate document image signals corresponding to at least one appearance feature of documents input to the machine, and wherein the data store includes instructions, and the computer is further operative responsive to the instructions to include in the data store document image data corresponding to the document image signals. Regardless, in view of Shiota ('712) as previously discussed, Shiota ('712) teaches generally that "software...installed in the server computer [to enable system functionalities] obviously may be included..." [column 3, lines 22-27]. In this vein, Kadono ('238) teaches "an optimal information reading unit for taking an image of surface information of an identification card" as included in its "automated teller machines". [see Abstract]. Further, Kandono ('238) teaches "a data storing unit for storing for each transaction the surface information (i.e. image) of an identification card...and the corresponding transaction information entered...". As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include the preceding limitations. Here, the technical ability existed to combine the elements as claimed and the results of the combination are predictable. (i.e. storage of image data related to a document/card). When combined, the elements perform the same function as they did

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separately (i.e. imaging device captures document image, camera captures individual's image).

As per Claim 26, Nama ('008) as modified teaches the apparatus of Claim 25 above.

However, Nama ('008) does not explicitly disclose the document image data is stored in correlated relation with image data produced responsive to the camera signals. Regardless, Nama ('008) generally teaches the correlation of one set of data (image data signals) with another set of data (transaction data signals) through its "transaction information module" [column 6, lines 29-36]. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include storing document image data in correlation with camera image data. Here, Applicant is merely substituting one form of data (transaction data signals) with another form of data (document image data signals) with predictable results. Further, not unlike Nama ('008), Kadono ('238) supports keeping "corresponding transaction information" together [Kadono ('238), Abstract]. Here, one of skill in the art would appreciate keeping an image of a document used in a transaction as associated with an image of an individual using said document in said transaction as evidence of the transaction. [see Nama ('008), column 1, line 50].

As per Claim 27, Nama ('008) as modified teaches the apparatus of Claim 25 above.

However, Nama ('008) does not explicitly disclose the data store includes further instructions, and the server is operative responsive to the further instructions to deliver the document image data through a network. Regardless, Shiota ('712) teaches generally that "software...installed in the server computer [to enable system functionalities] obviously may be included..." [column

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3, lines 22-27]. Further, Shiota ('712) discloses the delivery of image data over a network including the Internet [column 1, line 27]. In this vein, Kadono ('238) teaches a system where, on the occurrence of a suspect transaction [column 4, line 18], "current transaction information and [document image data]" are sent to "a supervisory center". [Abstract, e.g. another form of monitoring a transaction]. Here, said information is "transferred between an ATM and the central computer via the line control unit" [Kadono ('238), column 3, lines 67-68]. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to modify Nama ('008) to include the program instructions that when executed cause a computer server to deliver document image data through a network. Here, Applicant is merely substituting one form of data (image data signals) with another form of data (document image data signals) with predictable results. Transfers via a network would surely be appreciated by one of skill in the art.

Claims 28 & 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nama [4,991,008] in view of Shiota et al [6,337,712] in view of Java in view of Kadono et al [5,010,238] as discussed above, and further in view of Houvener et al [6,202,055].

As per Claim 28, Nama ('008) as modified teaches the apparatus of Claim 27 above.

However, Nama ('008) does not explicitly disclose a document verification terminal in operative connection with the network, and wherein the document verification terminal is in operative connection with a verification data store including data representative of indicia which is indicative of the genuineness of documents, and wherein the document verification terminal includes a further browser, and wherein the document verification terminal is operative to access the document image data through the server and to compare the document image data and the indicia from the verification data store. Regardless, Kadono

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(‘238) teaches its supervisory center as comprising a ”supervisory display means for displaying...identification card surface information...” [column 2, lines 11-13 & column 4, line 25, i.e. document image data displayed]. Here, Kadono (‘238) contemplates the review of past transactions, which include “card image data” [column 6, line 7] to assess whether a questionable card is being presented. [see column 6, lines 39-42]. Similarly, Houvener (‘055) teaches “a point of identification terminal” [Abstract, e.g. document verification terminal] to verify presented documents (i.e. checks/financial instruments) as legitimate via “communications [] established between the terminal and a remote database site” [column 3, line 11-12]. Here, said database contains verification images (i.e. authorized users, which indicates that a document is genuine) which are "transmitted to the point of identification terminal where they are displayed on a display means” [column 3, lines 14 & 20-21. Here, Examiner asserts that the browser discussed in Claim 1 would be appreciated as a logical display means.] Here, Examiner notes that, Houvener (‘055) supports the "wholesale scanning" and storage of a document and document data as part of this process. [see column 3, lines 50-53]. As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant’s invention, to modify Nama (‘008) to include the preceding limitations. One would have done so given that Houvener (‘055) and Kadono (‘238) both suggest verification terminals reading on Applicant’s claims as known. Here, Applicant is merely combining known elements with predictable results. Document verification systems perform the same function here as they would separately. Accessing such image through Applicant's image server does not serve to distinguish the claim and is an obvious variant under design choice

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rationales.

As per Claim 29, Nama ('008) as modified teaches the apparatus of Claim 28 above.

However, Nama ('008) does not explicitly disclose the indicia in the verification data store corresponds to written signatures, and wherein the document verification terminal is operative to compare signatures in documents represented by the document image data, to data representative of the written signatures in the verification data store. Regardless, Examiner points Applicant to the logic and evidence as discussed in Claim 28 above. In this vein, Houvener ('055) teaches the use of "hand-written signatures" as known "present, positive identification means". As such, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention to modify Nama ('008) to include the preceding limitations. Here, Applicant is substituting one known form of positive identification (i.e. picture id, driver's license, etc) for another (i.e. written signature) with predictable results. Here, Examiner notes that the matching of data is key (i.e. results in validity or non-validity), not what data is being matched.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John D. Scarito whose telephone number is (571) 270-3448. The examiner can normally be reached on M-Th (7:30-5:00), Alternate F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Abdi can be reached on (571) 272-6702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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